

REMARKS/ARGUMENTS

Reconsideration of this application in light of the above amendments and following comments is courteously solicited.

Initially the undersigned would like to thank Examiner Edmondson for the courtesies extended during an oral hearing held with the undersigned at the U.S. Patent and Trademark Office on November 3, 2005. During the above noted oral hearing, the outstanding official action was discussed in detail and the undersigned was greatly aided in formulating an appropriate response thereto.

Previously submitted independent claim 6 was rejected by the examiner under 35 U.S.C. 102 as being anticipated by U.S. Patent No. 6,183,875. As to how this rejection applies to the claims as amended herein, it is respectfully traversed.

As pointed out at the above noted oral hearing, independent claim 6 has been amended so as to set forth that the bond of the ceramic substrate to the solid aluminum member is substantially nitride free. A nitride free bond is critical to the present invention. In this regard, the examiner's attention is drawn, for example, to Page 6 lines 9-15 of the instant specification. This portion of the specification sets forth that the bonding temperature is set in the range of between 620°C to 650°C. It is set forth that if the temperature is higher than 650°C the aluminum plate nitride is to produce an aluminum/ceramic bonding substrate having low electric and thermal characteristics. This is undesirable in the present invention. Accordingly, the temperature during the bonding process is held in a specific range so as "to provide a substantially nitride free bond" as now claimed in independent claim 6. The prior art reference cited by the examiner, namely, the '875 document, fails to teach, disclose, suggest or render obvious the subject matter of

amended independent claim 6. In this regard the examiner's attention is drawn to column 9 lines 24-34 of the '875 document. It is clear from this portion of the '875 document that the bonding takes place at a temperature of between 700°C and 1000°C. In addition, the '875 patent teaches carrying out the process in an atmosphere of nitrogen. See for example Table 1 of the '875 document. Furthermore, the '875 teaches a final product which can comprise aluminum nitride. As pointed out above, the present invention specifically wishes to provide a nitride free bond and claim 6 has been amended so as to specifically set forth same. Accordingly, it is submitted that claim 6 is patentable over the cited prior art reference.

At the above noted oral hearing, the examiner indicated that she would reconsider her rejection based upon the claim amendments and aforesaid arguments. Applicants respectfully request the examiner to issue an early notice of allowance.


An earnest and thorough attempt has been made by the undersigned to resolve the outstanding issues in this case and place same in condition for allowance. If the Examiner has any questions or feels that a telephone or personal interview would be helpful in resolving any outstanding issues which remain in this application after consideration of this amendment, the Examiner is courteously invited to telephone the undersigned and the same would be gratefully appreciated.

It is submitted that the claims as amended herein patentably define over the art relied on by the Examiner and early allowance of same is courteously solicited.

If any fees are required in connection with this case, it is respectfully requested that they be charged to Deposit Account No. 02-0184.

Respectfully submitted,
Takayuki Takahashi et al.

By


Gregory D. LaPointe
Attorney for Applicants
Reg. No. 28,395
Tel: (203) 777-6628
Fax: (203) 865-0297

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I, Rachel Piscitelli, hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313" on November 9, 2005.

